

Table: Evaluation of Potential Models for the Menhaden Stock Assessment

<b>Criteria</b>	<b>BAM</b>	<b>MSVPA</b>	<b>SS3</b>	<b>UBC</b>	<b>SRA</b>
<i>Applicability to mgmt (benchmarks)</i>	Multiple options for benchmark computation	Externally estimated benchmarks	Multiple options for benchmark computation	Conditioned on MSY benchmarks	Limited to MSY benchmarks
<i>Used in other stock assessments</i>	Peer reviewed for menhaden and other species	Approach only peer reviewed	Peer reviewed for other species	Published but not peer reviewed as an assessment	Peer reviewed for other species
<i>Data requirements</i>	All available menhaden data	Much more data required (e.g., other species diet data)	All available menhaden data	All available menhaden data; need prior distributions	Less data required (limited to landings and indices); need prior distributions
<i>Model complexity</i>	Moderate	High	Potentially high; limited by data	Moderate	Low
<i>Measures of uncertainty</i>	Bootstrap and sensitivity runs	Sensitivity runs	MCMC, bootstrap, and sensitivity runs	MCMC and sensitivity runs	MCMC and sensitivity runs
<i>Understanding model properties and operation</i>	Familiar among committee	Familiar among committee	Least familiar among committee	Less familiar among committee	Less familiar among committee
<i>Appropriateness of model assumptions for menhaden</i>	Very appropriate	Less appropriate because of VPA-like assumptions	Very Appropriate	Less appropriate because of MSY benchmarks and strong priors	Less appropriate because of MSY benchmarks
<i>Model diagnostics</i>	Many	None in direct output; can be done externally	Many	Many possible but currently not coded	Few